

CLAIMS

I claim:

1. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising two pre-configured water pipes and a pre-configured drain pipe, all held in a generally predetermined spatial relationship to each other by at least one rigid bracket so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.
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2. The assembly of claim 1 where each of the water pipes further comprises an angled, lateral water pipe fixture extension of predetermined length and an air chamber at predetermined locations thereon, and the drain pipe further comprises an angled, lateral drain connection of predetermined length at a predetermined location thereon.
3. The assembly of claim 2 where each of the water pipe fixture extensions and the drain connection further comprises a sealed outer end.
4. The assembly of claim 3 where the sealed outer end of one of the water pipe fixture extensions is pre-marked with a red color, the sealed outer end of the other water pipe fixture extensions is pre-marked with a blue color and the sealed outer end of the water pipe fixture extensions and the drain connection are marked with at least one cut line.
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5. The assembly of claim 1 where the at least one bracket comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the drain pipe.

6. The assembly of claim 5 where the bracket further comprises at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.

7. The assembly of claim 2 where the water pipes, water pipe extensions and air chambers are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, poly-butylene and chlorinated polyvinylchloride; and the drain pipe and the drain pipe connection are manufactured from a material selected from the group consisting of: polyvinylchloride, copper and cast iron..

8. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising a primary plumbing assembly and a secondary plumbing assembly, the primary assembly further comprising two pre-configured water pipes and a pre-configured drain pipe, all held in a generally predetermined spatial relationship to each other by a rigid bracket, and the secondary assembly further comprising two pre-configured water pipe extensions and a pre-configured drain pipe extension, all held in a generally predetermined spatial relationship to each other by a rigid bracket, the secondary assembly configured to interconnect with the primary assembly so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.

9. The assembly of claim 8 where each of the water pipe extensions further comprises an angled, lateral water pipe fixture extension of predetermined length and an air chamber at predetermined locations thereon, and the drain pipe extension further comprises an angled, lateral drain connection of predetermined length at a predetermined location thereon.

10. The assembly of claim 9 where each of the water pipe fixture extensions, the drain pipe and the drain connection further comprise a sealed outer end.
11. The assembly of claim 10 where the sealed outer end of one of the water pipe fixture extensions is pre-marked with a red color, the sealed outer end of the other water pipe fixture extension is pre-marked with a blue color, and the sealed outer ends of the water pipe fixture extensions, the drain pipe and the drain connection are marked with at least one cut line.
12. The assembly of claim 8 where the bracket of the primary assembly comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the drain pipe, and the bracket of the secondary assembly comprises a base with a plurality of openings configured thereon to secure each of the water pipe extensions a predetermined distance from the drain pipe extension.
13. The assembly of claim 12 where the brackets of the primary assembly and the secondary assembly each further comprise at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.
14. The assembly of claim 9 where the water pipes, the water pipe extensions, the lateral water pipe fixture extensions and the air chambers are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, poly-butylene

and chlorinated polyvinylchloride; and the drain pipe, the drain pipe extension and the drain connection are manufactured from a material selected from the group consisting of: polyvinylchloride, copper and cast iron.

15. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising two pre-configured water pipes and a pre-configured relief pipe, each of the pipes having an upper end and a lower end, with the upper ends of the water pipes and the relief pipe extending laterally a predetermined length at an angle from a plane defined by the lower ends of the water pipes and the relief pipe, all held in a generally predetermined spatial relationship to each other by at least one rigid bracket so that the assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.
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16. The assembly of claim 15 where the upper ends of the water pipes and the relief pipe are sealed.
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17. The assembly of claim 16 where the sealed outer end of one of the water pipes is pre-marked with a red color, the sealed outer end of the other water pipe is pre-marked with a blue color and the sealed outer end of the relief pipe is pre-marked with a green color, and the sealed outer ends of the water pipes and the relief pipe are marked with at least one cut line.
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18. The assembly of claim 15 where each of the two water pipes further comprises an air chamber at a predetermined location thereon.

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19. The assembly of claim 15 where the at least one bracket comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the relief pipe.

20. The assembly of claim 19 where the bracket further comprises at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.

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21. The assembly of claim 15 further comprising a tertiary assembly, the tertiary assembly comprising a pre-configured hot water connection, a pre-configured cold water connection and a pre-configured relief connection, each having a first end and a second end, the hot and cold water connections adapted to connect to the water pipes at their first ends and to a water heater at their second ends and the relief connection adapted to connect to the relief pipe at its first end and the water heater at its second end.

22. The assembly of claim 21 where the cold water connection further comprises a valve at a predetermined location thereon.

23. The assembly of claim 15 where the water pipes and the relief pipe are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, poly-butylene and chlorinated polyvinylchloride.

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24. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising a primary plumbing assembly and a secondary plumbing assembly, the primary assembly further comprising two pre-configured water pipes and a pre-configured relief pipe, all held in a generally predetermined spatial relationship to each other by a rigid bracket, and the secondary assembly further comprising two pre-configured water pipe extensions and a pre-configured relief pipe extension, all held in a generally predetermined spatial relationship to each other by a rigid bracket, the secondary assembly configured to interconnect with the primary assembly so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.

25. The assembly of claim 24 where each of the water pipe extensions and the relief pipe extension have an upper end and a lower end, the upper ends of the water pipe extensions and the relief pipe extension being sealed and extending laterally at an angle a predetermined distance from a plane defined by the lower ends of the water pipe extensions and the relief pipe extension.

26. The assembly of claim 25 where the sealed upper end of one of the water pipe extensions is pre-marked with a red color, the sealed upper end of the other water pipe extension is pre-marked with a blue color and the sealed upper end of the relief pipe extension is pre-marked with a green color, and the sealed outer ends of the water pipe extensions and the relief pipe extension are marked with at least one cut line.

27. The assembly of claim 24 where the bracket of the primary assembly comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the relief pipe, and the bracket of the secondary assembly comprises a base with a plurality of openings configured thereon to secure each of the water pipe extensions a predetermined distance from the relief pipe extension.

5 28. The assembly of claim 27 where the brackets of the primary assembly and the secondary assembly further comprise at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.

29. The assembly of claim 24 where each of the water pipes further comprises an air chamber at a predetermined location thereon.

30. The assembly of claim 24 further comprising a tertiary assembly, the tertiary assembly comprising a pre-configured hot water connection, a pre-configured cold water connection and a pre-configured relief connection, each having a first end and a second end, the hot water connection and the cold water connection being adapted to connect to the water pipe extensions at their first end and to a water heater at their second ends, and the relief connection adapted to connect to the relief pipe extension at its first end the water heater at its second end.

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31. The assembly of claim 30 where the cold water connection further comprises a valve at a predetermined location thereon.
32. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising two pre-configured water pipes and a pre-configured drain assembly, all held in a generally predetermined, spatial relationship to each other by at least one rigid bracket so the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.
33. The assembly of claim 32 further comprising a connection box, the connection box comprising an interior space defined by at least three walls, a pre-wired electrical receptor and a junction box in communication with the electrical receptor, the connection box being adapted to receive the water pipes, the drain assembly and the electrical receptor.
34. The assembly of claim 32 where each of the water pipes further comprises an upper end and a valve at a predetermined location on the upper end.
35. The assembly of claim 32 where the drain assembly further comprises a connecting section, a vent stack and a trap, the trap being positioned between and in communication with the connecting section and the vent stack.

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36. The assembly of claim 32 where the at least one bracket comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the drain assembly.
37. The assembly of claim 36 where the base further comprises at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.
38. The assembly of claim 32 where the water pipes are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, polybutylene and chlorinated polyvinylchloride; and the drain pipe assembly is manufactured from a material selected from the group consisting of: polyvinylchloride, copper and cast iron.
39. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising a primary assembly and a secondary assembly, the primary assembly further comprising two pre-configured water pipes and a pre-configured drain pipe all held in a generally predetermined, spatial relationship to each other by a rigid bracket, and the secondary assembly further comprising two pre-configured water pipe extensions and a pre-configured drain assembly, all held in a generally predetermined, spatial relationship to each other by a rigid bracket, the secondary assembly configured to interconnect the primary assembly so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.

40. The assembly of claim 39 further comprising a connection box, the connection box comprising an interior space defined by at least three walls, a pre-wired electrical receptor and a junction box in communication with the electrical receptor, the connection box being adapted to receive the water pipe extensions, the drain assembly and the electrical receptor.

41. The assembly of claim 39 where the each of the water pipe extensions further comprises an upper end with a valve located at a predetermined location on the upper end.

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42. The assembly of claim 39 where the drain assembly further comprises a connecting section, a vent stack and a trap, the trap being positioned between and in communication with the connecting section and the vent stack and the vent stack adapted to connect to the main drain pipe.

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43. The assembly of claim 39 where the brackets comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the drain assembly.

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44. The assembly of claim 43 where the base further comprises at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.

45. The assembly of claim 39 where the water pipes and water pipe extensions are manufactured from a material selected from the group consisting of: copper, stainless steel,

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polyvinylchloride, butylene, poly-butylene and chlorinated polyvinylchloride; and the drain pipe and drain pipe assembly are manufactured from a material selected from the group consisting of: polyvinylchloride, copper and cast iron.

46. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising a pre-configured water supply pipe held in a generally predetermined location by at least one rigid bracket so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.
47. The assembly of claim 46 where the water supply pipe further comprises an angled, lateral fixture extension of predetermined length and an air chamber at a predetermined location thereon.
48. The assembly of claim 47 where the fixture extension comprises a sealed outer end and the sealed outer end is marked with at least one cut line.
49. The assembly of claim 46 where the water supply pipe further comprises a means to secure the assembly to the at least one bracket.
50. The assembly of claim 46 where the bracket comprises a centered base with a plurality of openings thereon and at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.

51. The assembly of claim 46 where the water pipe and the fixture extension are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, poly-butylene and chlorinated polyvinylchloride.

52. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising a pre-configured water supply pipe, a sill cock assembly and an extension, the extension having a first end adapted to connect to the water supply pipe and a second end adapted to connect to the sill cock assembly, all held in a generally predetermined location by at least one rigid bracket, so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture.

53. The assembly of claim 52 where the sill cock assembly comprises a faucet assembly and a connecting section, the connecting section having a first end adapted to connect with the extension and a second end adapted to connect with the faucet assembly.

54. The assembly of claim 52 where the sill cock assembly is adapted to be resistant to freezing conditions.

55. The assembly of claim 53 where the sill cock assembly further comprises an isolation block adapted to at least partially surround the connecting section.

56. The assembly of claim 52 where the water supply pipe further comprises a top section with a female threaded cavity therein and the extension further comprises a male threaded end on the first end.

57. The assembly of claim 52 where the water pipe and the extension are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, poly-butylene and chlorinated polyvinylchloride.
58. A modular plumbing assembly for connection to a plumbing fixture, the assembly comprising two pre-configured water pipes, at least one water discharge assembly and a valve assembly configured to receive the water pipes and the at least one water discharge assembly, the water pipes and the at least one water discharge assembly held in a generally predetermined spatial relationship to each other by at least one rigid bracket such that the plumbing assembly is at an appropriate finished height and orientation.
59. The assembly of claim 58 where the at least one water discharge assembly is selected from the group consisting of: a shower assembly, a fill spout assembly and both a shower assembly and a fill spout assembly.
60. The assembly of claim 58 where each of the water supply pipes further comprises an air chamber at a predetermined location thereon.
- 15 61. The assembly of claim 59 where the shower assembly comprises a shower assembly connecting pipe, a shower assembly pipe, a shower arm and a shower head, the shower assembly connecting pipe adapted to connect to the valve assembly on a first end and the shower assembly pipe on a second end, the shower assembly pipe adapted to connect to the shower arm and the shower arm adapted to connect to the shower head.

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62. The assembly of claim 59 where the fill spout assembly further comprises a fill spout assembly connecting pipe, fill spout assembly pipe, an extension and a fill spout, the fill spout assembly connecting pipe adapted to connect to the valve assembly on a first end and the fill spout assembly pipe on a second end and the fill spout assembly pipe adapted to connect to the extension and the extension adapted to connect to the fill spout.
63. The assembly of claim 58 where the valve assembly is selected from the group consisting of:
a single lever system, a double lever system and a triple lever system.
64. The assembly of claim 58 where each of the water supply pipes and the at least one water discharge assembly are connected to the valve assembly through dielectric unions.
65. The assembly of claim 58 where the at least one bracket comprises a base with a plurality of openings configured thereon to secure each of the water pipes a predetermined distance from the at least one water discharge assembly.
66. The assembly of claim 65 where the at least one bracket further comprises at least one leg contiguous with an end of the base, the at least one leg forming an approximate 90 degree angle with the base and further comprising a means to secure the bracket to a frame member.

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67. The assembly of claim 58 where the water pipes are manufactured from a material selected from the group consisting of: copper, stainless steel, polyvinylchloride, butylene, polybutylene and chlorinated polyvinylchloride.

68. A kit suitable for installation of a plumbing assembly to a plumbing fixture so that the plumbing assembly is at an appropriate finished height and orientation for connection to the plumbing fixture, the kit comprising:

- a plumbing assembly;
- a finishing kit; and
- installation instructions.

69. The kit of claim 68 where the at least one plumbing assembly is selected from the group consisting of: the plumbing assembly described in claims 1, 8, 15, 24, 32, 39, 46, 52 and 58.

70. The kit of claim 68 where the finishing kit and the installation instructions are selected based on the plumbing assembly selected.

71. A method for the installation of a modular plumbing assembly to connect a plumbing fixture to a main plumbing system, the method comprising the steps of:

- selecting the plumbing assembly for installation, the plumbing assembly being selected to correspond to the plumbing fixture;
- taking an initiation action, the initiation action ensuring that the plumbing assembly is at an appropriate finished height for the selected plumbing fixture;

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c. connecting the plumbing assembly to the main plumbing system, the plumbing assembly being configured to interconnect with the main plumbing system; and

d. securing the plumbing assembly to at least one frame member.

72. The method of claim of claim 71 where the plumbing assembly is secured to the at least one frame member by at least one bracket.

5 73. The method of claim of claim 71 where the initiation action is selected from the group consisting of: preparing a pipe of the main plumbing system to extend a predetermined distance from a finished floor and securing the plumbing assembly a predetermined distance from the finished floor.

10 74. The method of claim 71 where the plumbing assembly is selected from the group consisting of: the plumbing assembly described in claims 1, 15, 32, 46, 52 and 58.

75. The method of claim 71 further comprising connecting the plumbing assembly to the plumbing fixture.

76. The method of claim 75 where the plumbing assembly is connected to the plumbing fixture with the aid of a finishing kit.

15 77. The method of claim 71 where the plumbing fixture is selected from the group consisting of: a lavatory, a sink, a laundry tub, a water heater, a washing machine and a water closet..

78. The method of claim 71 where the installation of the plumbing assembly is guided by a set of installation instructions.

79. The method of claim 71 where the plumbing assembly comprises at least a primary assembly and a secondary assembly, the primary assembly being connected to the main plumbing system and the secondary assembly being connected to the primary assembly, the primary assembly being configured to interconnect with the secondary assembly and the main plumbing system.

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80. The method of claim of claim 79 where the primary assembly and the secondary assembly are secured to the at least one frame member by at least one bracket.

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81. The method of claim of claim 79 where the initiation action is selected from the group consisting of: preparing a pipe of the main plumbing system to extend a predetermined distance from a finished floor and securing the plumbing assembly a predetermined distance from the finished floor.

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82. The method of claim 79 where the plumbing assembly is selected from the group consisting of: the plumbing assembly described in claims 8, 24 and 39.

83. The method of claim 79 further comprising connecting the plumbing assembly to the selected plumbing fixture.

84. The method of claim 83 where the plumbing assembly is connected to the plumbing fixture with the aid of a finishing kit.

85. The method of claim 79 where the plumbing fixture is selected from the group consisting of: a lavatory, a sink, a laundry tub, a water heater and a washing machine.

86. The method of claim 79 where the installation of the plumbing assembly is guided by installation instructions.

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